

<b>Applicant Name</b>	Pinesdale, Town of
<b>Project Name</b>	Pinesdale Water System Improvements

### **Project Abstract**

The water system for the Town of Pinesdale has been constructed over time with minimum planning and no consideration for fire protection, leading to serious deficiencies with the existing public water system.

During the 2000 wild fire season, fires burnt to the edge of town, destroyed four structures, and required evacuations. During the fires, the treatment plant was shut down so that raw water could be diverted to the irrigation system to help meet fire-fighting needs. Because of the inadequate water storage system, the town had little water in reserve. Because of the very limited storage system, undersized water mains, and limited fire hydrants, the town had no residential fire protection. Had the fire advanced much farther to the east, the entire town could have been lost.

The Pinesdale water system currently has the following deficiencies:

- Inadequate water storage; and
- Inadequate fire protection storage.

The town's current water supply is inadequate to supply the growing town's residential and fire protection needs. The town has water rights from Sheafman Creek. The town also has three wells: two that supply irrigation water, and one for household use. The town has recently drilled 40 different sites in an attempt to secure another well, but has been unsuccessful in finding water.

The average demand is 114,500 gallons per day; with a fire flow demand of 2,500 gallons per minute for a duration of two hours, the required storage would be 414,500 gallons. The existing water storage facilities are not adequate.

The distribution system experiences pressure extremes. Some areas in the system have very high pressures, while other areas have very low pressures.

System problems that need to be addressed within the water distribution system include:

- Lack of fire hydrants;
- Undersized mains to supply water to fire hydrants; and
- Dead-end water mains.

Because of budgeting restrictions, the town will complete this project in two phases.

Phase 1 is immediate and will involve the following corrections to the water system:

- Removal of the existing southwest tank;
- Installation of a new tank adjacent to the existing water treatment plant;
- Installation of pressure-reducing valves throughout the distribution system;
- Installation of a water line from the new tank to the location of the existing southwest tank; and
- Addition of three new hydrants to the system.

Phase 2 will be completed in the future, and involves the following corrections to the water system:

- Replacing four-inch mains with six-inch or larger mains;
- Adding blow offs to dead-end water mains; and
- Installing a water metering system.